



“Lumen” Laser Productivity Center SPECIFICATIONS



"Lumen"

Intelligent Automated Production...

...Designed for the highest volume production situations.

Laser Productivity Center

<i>Model</i>	<i>Laser Power/Peak Power</i>	<i>Features In All Systems:</i>
LPC4000	200/600W	<ul style="list-style-type: none"> • Sealed CO₂ Lasers, delivering high power and low operating cost, • Advanced industrial automation software package and flexible and automated material handling • High precision and reliability, with optically read linear encoders, in closed loop, and brushless servos. Flying optics for high speed cutting • Large format cutting area (4' X 4' & 4' X 8'), with vacuum for material hold down and fume evacuation • Moving platform bed with adjustable load height, and 12" of vertical travel; deep z-axis for fixturing and tall part cutting. • Auto-focus and vision registration system, with material sensor and visible aiming laser • Networked touch screen control workstation and job management and control software • Class I safety with interlocked laser, doors, exhaust, chiller and assist gas, to protect both the machine and operators.
LPC5000	250/750W	
LPC8000	400/1000W	
LPC10000	500/1500W	

**Tested Average Power (TAP)
In a Beam configuration*



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General Specifications

Dimensions	LPC Lumen: <ul style="list-style-type: none"> ▪ 52" high, 74" wide, 64" deep ▪ Weight: 1600 lbs. ▪ Cutting height: 40" LPC Lumen Pallet change table: <ul style="list-style-type: none"> ▪ 39" high, 68" wide, 65" deep ▪ Weight: 300 lbs. 	Cutting Pallets	<ul style="list-style-type: none"> ▪ Removable pallet system ▪ Front and Rear pass-through ▪ Honeycomb work support
Machine Vision	<ul style="list-style-type: none"> ▪ Machine vision system ▪ Registration to printed markings or part features. ▪ Automatic calibration 	Laser Power Control	<ul style="list-style-type: none"> ▪ Digital laser power control ▪ Power selectable as constant or proportional to velocity ▪ Selectable laser pulse rate
Vertical Travel	<ul style="list-style-type: none"> ▪ Moving platform with 12" of vertical travel ▪ Adjustable load height: 28"- 40" 	Focusing	<ul style="list-style-type: none"> ▪ Auto-focus system with material sensor ▪ 5 axis crash sensor
Maximum Speed	<ul style="list-style-type: none"> ▪ 2,400"/min cutting ▪ 3,000"/min traversing ▪ 3,000"/min raster engraving 	Assist Gas/Exhaust / Vacuum Bed	<ul style="list-style-type: none"> ▪ Vacuum material hold-down plenum and separate engraving exhaust port. ▪ External ventilation fan required ▪ Automatic (software controlled) assist gas regulator.
Positioning	Linear encoders with 2 micron resolution	Cooling	External chiller required (included with Lumen DCC PA system)
Accuracy	<ul style="list-style-type: none"> ▪ +/- .001"/ft overall accuracy** ▪ +/- .0002"/ft. repeatability 	PC / File Server	Requires Windows/Ethernet.
Contouring	Full look-ahead and contouring capabilities.	Power	208-240VAC, 47-63 Hz, three-phase, 30A
Materials	<ul style="list-style-type: none"> ▪ Metal, Plastics, Wood, Paper, Composites, Fabric, Rubber ▪ Max thickness 1" ▪ Max clearance: 12" 	Safety	<ul style="list-style-type: none"> ▪ Safety interlocks on all covers and enclosures ▪ Class I system (Complies with 21 CFR Chapter 1, Subchapter J)
Software Interface	LaserLink program including: <ul style="list-style-type: none"> ▪ Windows XP ▪ G-code support ▪ AI, DXF, HPGL, DWG, Gerber, JPG, BMP, TIF file import ▪ Full geometry editing ▪ Database of laser parameters ▪ Job management software 	User Controls	<ul style="list-style-type: none"> ▪ Networked touch screen control workstation and job management system; manages jobs; shows all settings and file information; interfaces with most CAD formats ▪ Jog, Bed height controls ▪ Home, Park, Load buttons ▪ Exhaust, gas assist controls ▪ Editing of laser settings ▪ Networked HMI workstation ▪ Bar code reader available

Notes: These specifications are applicable as of **SEP 09**, but are subject to change without notice.

**Accuracy quoted is under controlled conditions. Accuracy may vary depending on conditions in customer's facility.